

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
WASHINGTON, D.C. 20555

April 4, 1995

NRC GENERIC LETTER 89-04, SUPPLEMENT 1: GUIDANCE ON DEVELOPING ACCEPTABLE
INSERVICE TESTING PROGRAMS

Addressees

All holders of operating licenses or construction permits for nuclear power reactors.

Purpose

The U.S. Nuclear Regulatory Commission (NRC) is issuing this generic letter to notify addressees **that** it is issuing NUREG-1482, "Guidelines for **Inservice** Testing Programs at Nuclear Power Plants." **NUREG-1482** contains recommendations that addressees may follow in developing and implementing **inservice** testing programs and includes the positions from Generic Letter (GL) 89-04, "Guidance on Developing Acceptable **Inservice** Testing Programs," supplemented with current considerations for using these positions.

Description of Circumstances

NUREG-1482 describes historical and current perspectives on the regulatory requirements for **inservice** testing of pumps and valves in nuclear power plants. It includes information on the format and content for inservice testing programs and relief requests, examples of relief requests, clarification of issues described in information notices or other NRC letters on **inservice** testing, and current considerations for positions in GL 89-04. Many of the recommendations relate to issues that either are not addressed in the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (the Code), were not considered in the development of the Code requirements, or have been identified at a group of plants that were built prior to the promulgation of requirements for inservice testing. **Because** the staff has received a number of similar relief requests, the general guidance will allow for greater efficiency in licensee preparation and the staff review of these submittals.

In Appendix G to the NUREG report, the staff responds to public comments received on the draft **NUREG-1482** published in 1993. The information has also been incorporated into the text of the final NUREG as appropriate. Addressees may obtain copies of **NUREG-1482** from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37802, Washington, D.C. 20013-7082.

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Discussion

Addressees may use **NUREG-1482** as guidance for developing **IST** programs. The intent of the guidelines document is, in part, to provide the required "Commission approval" pursuant to 10 CFR **50.55a(f)(4)(iv)** to allow licensees to implement portions, as listed in Attachment 1, of the 1989 Edition of the ASME Code incorporated in 10 CFR 50.55a(b) without further submittals of formal "relief requests." Other portions may be used in **IST** programs subject to receipt of specific Commission approval. No new staff interpretations are imposed on licensees. The remaining recommendations provide guidance on the information that should be included in relief requests and provide specific details for those requests that have generic applications.

Requested Information

Licensees who voluntarily choose to use the guidance in **NUREG-1482** to make **changes** to their **inservice** testing programs may need to submit revised relief requests or program documents to NRC if such documents are affected. Use of the guidance does not necessarily require any information to be submitted.

Licensees who do not modify their inservice testing programs are not expected to submit any response to this generic letter.

Required Response

All addressees who voluntarily choose to use the guidance in **NUREG-1482** to make changes to their **inservice** testing programs are required to submit a response to the previously requested information, if appropriate.

Address the required written reports to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, **D.C.** 20555, under oath or affirmation under the provisions of Section 182a, Atomic Energy Act **cf** 1954, as amended, and Section 50.54(f) of **Title 10** of the Code **of Federal Regulations** (10 CFR 50.54(f)).

Backfit Discussion

This generic letter only requests applicable information under the provisions of 10 CFR 50.54(f) from addressees who voluntarily choose to use the guidance in **NUREG-1482** to make changes to their inservice testing programs. Therefore, the staff has not performed a backfit analysis. The information **requested is** needed to evaluate voluntary changes to the inservice testing programs in response to the information in this generic letter.

The evaluation required by 10 CFR 50.54(f) to justify this information request is included in the preceding discussion.

Federal Register Notification

A notice of opportunity for public comment on this generic letter and the draft **NUREG-1482** was published in the **Federal Register** (58 FR 65738) on

December 16, 1993. In Appendix G to the NUREG report, the staff responds to public comments received. The information has also been incorporated into the text of the final NUREG as appropriate.

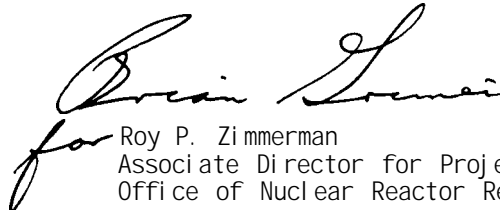
Paperwork Reduction Act Statement

The voluntary information collections contained in this request are covered by the Office of Management and **Budget** clearance number 3150-0011, which expires **July 31, 1997**. The public reporting burden for this voluntary collection of information is estimated to average 40 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this voluntary collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch (T-6 **F33**), U.S. Nuclear Regulatory Commission, Washington, **D.C.** 20555, and to the Desk Officer, Office of Information and Regulatory Affairs, NE08-10202, (3150-0011), Office of Management and **Budget**, Washington, **D.C.** 20503.

Compliance with the following request for information is purely voluntary. The information would assist NRC in evaluating the cost and benefits of inservice testing program changes associated with this generic letter:

- (1) the licensee staff time and costs to prepare any changes to the inservice testing program and
- (2) an estimate of the long-term costs or savings accruing as a result of implementing any changes to the inservice testing program

If you have any questions about this matter, please contact the technical contact listed below or the appropriate Office of Nuclear Reactor Regulation (**NRR**) project manager.


for Roy P. Zimmerman
Associate Director for Projects
Office of Nuclear Reactor Regulation

Technical contact: Patricia Campbell, NRR
301-415-1311

Lead Project Manager: Jacob Zimmerman, NRR
301-415-2426

Attachments:

1. Approved Code Editions, Addenda,
or Portions Thereof
2. List of Recently Issued NRC Generic Letters

Approved Code Editions, Addenda, or Portions Thereof

Section 50.55a of Title 10 of the **Code of Federal Regulations** (10 CFR 50.55a) defines the requirements for applying industry codes and standards to boiling or pressurized water-cooled nuclear power facilities. Each of these facilities is subject to the conditions in paragraphs (a), (f), and (g) of 10 CFR 50.55a for inservice inspection and inservice testing (IST). By **rulemaking** effective September 8, 1992 (see **Federal Register Vol. 57, 34666**), the U.S. Nuclear Regulatory Commission (NRC) established paragraph (f) to separate the IST requirements from the inservice inspection requirements in paragraph (g). The American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (the Code), Section XI, Subsections **IWP** and **IWV**, specify the IST requirements for pumps and valves. The 1989 edition of Section XI was incorporated by reference into paragraph 50.55a(b) by the **rulemaking** effective September, 1992. The 1989 edition specifies that the rules for the IST of pumps and valves are stated in the ASME/ANSI Operations and Maintenance (OM) Standards, Part 6, "**Inservice** Testing of Pumps in Light-Water Reactor Power Plants," and Part 10, "**Inservice** Testing of Valves in Light-Water Reactor Power Plants." An exception to **OM-10** was taken in the regulation related to leakage testing of containment isolation valves (see 10 CFR 50.55a (b)(2) (vii)).

NUREG-1482, "Guidelines for **Inservice** Testing at Nuclear Power Plants," discusses **OM-6** and **OM-10**, which may be implemented by licensees pursuant to 10 CFR 50.55a (f)(4)(iv). **NUREG-1482**, through the staff's endorsement in the generic letter supplement, gives the requisite approval for 10 CFR 50.55a (f)(4)(iv) for updating an IST program to the requirements of **OM-6** and **OM-10** (and **OM-1** through reference in **OM-10**) provided the licensee documents the use of **OM-6** and **OM-10** in the IST program. The NUREG, through the generic letter supplement per (f)(4)(iv), also gives approval to implement selected portions of **OM-6** and **OM-10** as discussed in the following sections of **NUREG-1482**:

- 3.1.1 Deferring Valve Testing to Cold Shutdown or Refueling Outage
- 3.3.2 Concurrent Intervals (in part)
- 4.1.4 Extension of Test Interval to Refueling Outage for Check Valves Verified Closed by Leak Testing
- 4.2.5 Verification of Remote Position Indication for Valves by Methods Other Than Direct Observation
- 4.2.7 Stroke Time Measurements Using Reference Values
- 4.3.3 Test Supervisor Qualifications

- 4.3.4 Frequency and Method of Testing Automatic Depressurization Valves
in Boiling Water Reactors
- 4.4.3 Multiple Containment Isolation Valve Leak-Rate Testing
- 4.4.5 Leak-Rate Testing Using **OM-10** Requirements
- 5.1.2 Continued Measurement of Parameters Deleted from OM-6
- 5.3 Allowable Variance from Reference (for fixed resistance systems)
- 5.4 Monitoring Pump Vibration Per OH-6
- 5.7 Use of OM-6 Table 3b Ranges for Hydraulic Parameters
- 5.8 Duration of Tests

LIST OF RECENTLY ISSUED GENERIC LETTERS

Generic Letter	Subject	Date of Issuance	Issued To
95-01	NRC STAFF TECHNICAL POSITION ON FIRE PROTECTION FOR FUEL CYCLE FACILITIES	01/26/95	ALL CURRENT LICENSEES & APPLICANTS FOR URANIUM CONVERSION & FUEL FABRICATION FACILITIES.
94-04	VOLUNTARY REPORTING OF ADDITIONAL OCCUPATIONAL RADIATION EXPOSURE DATA	09/02/94	ALL HOLDERS OF OLS OR CPS FOR NPRs, RADIOGRAPHY LICENSEES, FUEL PROCESSING LICENSEES, FABRICATING & REPROCESSING LICENSEES, MANUFACTURERS & DISTRIBUTORS OF BY-PRODUCT MAT'L , INDEPENDENT SPENT FUEL STORAGE INSTALLATIONS, FACILITIES FOR LAND DISPOSAL OF LOW-LEVEL WASTE, & GEOLOGIC REPOSITORIES FOR HIGH-LEVEL WASTE.
94-03	INTERGRANULAR STRESS CORROSION CRACKING OF CORE SHROUDS IN BOILING WATER	07/22/94	ALL HOLDERS OF OLS OR CPS FOR BOILING WATER REACTORS EXCEPT FOR BIG ROCK POINT, WHICH DOES NOT HAVE A CORE SHROUD.
94-02	LONG-TERM SOLUTIONS AND UPGRADE OF INTERIM OPERATING RECOMMENDATIONS FOR THERMAL-HYDRAULIC INSTABILITIES IN BOILING WATER REACTORS	07/11/94	ALL HOLDERS OF OLS FOR BOILING WATER REACTORS EXCEPT BIG ROCK POINT
94-01	REMOVAL OF ACCELERATED TESTING AND SPECIAL REPORTING REQUIREMENTS FOR EMERGENCY DIESEL GENERATORS	05/31/94	ALL HOLDERS OF OLS FOR NPRs

OL = OPERATING LICENSE
 CP = CONSTRUCTION PERMIT
 NPR = NUCLEAR POWER REACTORS